

### Abstract

A design support apparatus comprises: a flow analysis means for analyzing a flow of thermosetting resin injected into a resin filling cavity to mold a resin mold product made of the thermosetting resin, using a finite difference method or a finite element method; a residual strain calculation means for calculating residual strain (or stress) of the thermosetting resin after heat shrinkage of the thermosetting resin injected into the resin filling cavity to mold said resin mold product; and a strength analysis means for analyzing strength of said resin mold product, using a finite element method. According to this arrangement, strength of the resin mold product made of the thermosetting resin can be predicted accurately.